

METHOD FOR MEASURING DIMENSIONS OF MINUTE STRUCTURES AND APPARATUS FOR PERFORMING THE SAME

ABSTRACT OF THE DISCLOSURE

5 A method for measuring dimensions of minute structures on a substrate
include irradiating primary electrons onto the minute structures, and detecting
secondary electrons generated from the minute structures. Image data of the
minute structures is formed, and at least two measuring regions are determined
over the minute structures using the image data. The dimensions of the minute
10 structures corresponding to the measuring regions are calculated. The primary
electrons are provided from an electron emission member to the minute
structures, and the secondary electrons are converted into current signals and
then imaged in a displaying member. An operation member calculates the
dimensions of the minute structures corresponding to the measuring regions
15 using the image data of the minute structures stored in a storage member and
measurement data that is measured at the measuring regions.